

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016070**Date Inspected:** 02-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 2

This QA Inspector randomly observed the following work in progress in Bay 2:

SAW welding of weld joint FB3330-001-002 located on floor beam. Welder was identified as 045265. QC was identified as ZPMC CWI Li Zhi Jiang (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhang Yong Gang (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2221-L2c-S-2.

Bay 4

This QA Inspector proceeded to Bay 3 in response to ZPMC Inspection Notification #06245 for magnetic particle testing (MT) inspection. The floor beam FB3108-001, listed on the above noted notification, was not observed anywhere in Bay 3. This QA Inspector found FB3108-001 in Bay 4 and performed the following:

This QA Inspector performed random visual testing (VT) and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as FB3108-001.

The weld designations reviewed were: 012~018, 034~038, 041~044, 047, 048, 141, 142.

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Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW welding of weld joint NSD1-TL5-3E-F-9A located on PCMK north tower, lift 5, internal connection plates. Alternating welders were identified as 066418, 066703. QC was identified as ZPMC CWI Qiu Wen (QC2).

Welding variables recorded by QC2 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Chi Zheng Hua.

SMAW welding of weld joint SSD1-TL5-1B-F-14 located on PCMK south tower, lift 5, internal connection plates.

Alternating welders were identified as 050289, 500363. QC was identified at QC2. Welding variables recorded by QC1 appeared to comply with WPS-B-T-3213-TC-U4c. Also at this location and appearing to be monitoring the welding operation was ABF Representative Chi Zheng Hua.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW welding of weld joint ESD1-TL5-2B/F-12B located on PCMK east tower, lift 5, internal connection plates.

Alternating welders were identified as 202100, 040667, 040690, 040614. QC was identified at QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC CAWI Liu Dao Feng (QCA2). Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

SMAW welding of weld joint WSD1-TL5-4E/F-8B located on PCMK west tower, lift 5, internal connection plates.

Alternating welders were identified as 067520, 066261. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

SMAW welding of weld joint WSD1-TL5-4E/F-9A located on PCMK west tower, lift 5, internal connection plates.

Alternating welders were identified as 068924, 066416. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cui Zheng Hua.

Heavy Dock

This QA Inspector randomly observed the following work being performed on the Heavy Dock:

This QA Inspector observed no apparent welding related work was being performed on the Heavy Dock. All 4 tower lift's 3 were connected and positioned on a base pedestal. Tower lift's 2 east, south, and west appeared to be connected and positioned on another base pedestal. A ZPMC 1600 ton floating crane was rigged to the top of north tower, lift 2 with the bottom of north tower, lift 2 touching on dunnage on the deck of the dock. ZPMC personnel were working at the bottom of north tower, lift 2 appearing to be removing temporarily bolted splice plate assemblies. See photos below.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No significant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Dawson, Paul

QA Reviewer